

# DRINKING WATER SOURCE PROTECTION

ACT FOR CLEAN WATER

## Technical Bulletin: Climate Change and the Director's Technical Rules

Date: Updated August 2009

Ontario Ministry of the Environment

Regulation regarding the content of the assessment report became law in November 2008. In the section outlining other information to be included in an assessment report, the following clause has been included to address climate change:

### *Part II.2 – Assessment Report Contents*

*9.(2)(e) with respect to the assessment of the climate of the source protection area undertaken in accordance with Part III.1, the effects that projected changes in the climate over the following 25 years will have on the conclusions reached in the assessment report and a list of the information sources underlying those projected changes;*

In addition, the Director's Technical Rules (rules), established in December 2008, contain a clause pertaining to climate change:

### *Part III.1 – Conceptual Water Budget*

*19. A conceptual water budget shall include an assessment of the following elements,*

*(13) The climate of the area, including historical trends and existing projections*

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*related to changes in the climate of the area.*

As a result of the regulation's release, a number of questions regarding the purpose and intent of these requirements have been raised. There is also some uncertainty about whether new work is necessary to meet the obligation raised by the regulation and rules. The purpose of this bulletin is to provide guidance.

These regulation and rules require that the assessment report contain a summary of the existing climate change knowledge and climate data available to source protection committees (SPCs) and their interpretation of how it could impact the conclusions in the assessment reports. The intent is for SPCs to work with the Conservation Authority and other partners to gather available knowledge.

The regulation and rules were intended to be an information gathering exercise for currently available data.

- Some source protection areas have partners that have advanced further than others in their study of climate change and know that the changes in the local climate will impact their water quality and water quantity. If climate change projections or modelling are already completed, this information should be included in the conceptual water budget as required by rule 19(13). If these data indicate to a SPC that there may be water shortages in the next 25 years, and this is different than the area's current assessment report findings, then that would be information to include in the summary.
- Some SPCs do not have future climate projections available. In this case, their summary would include a declaration that there is no climate change data or analysis available. If no climate change information specific to the source protection area is available, then the summary could still include an analysis of impacts on the conclusions of the assessment report. This could be based on the broad predictions in climate trends for the whole of Ontario and would consist of a wide exploration of the potential impacts on the conclusions of the assessment report. This is not mandatory, but is allowed under the rules. Once more information becomes available in the future, this exploration can be revisited with better capability and in greater detail.
- SPCs may also want to include data on flooding and extreme storm events and their potential impact on water quality and vulnerable areas. Many

areas in the province have experienced more frequent flooding in recent years than would be expected from historic weather patterns. If possible, it would be beneficial to consider the potential effects of this on the conclusions of the assessment report.

This climate change clause within the regulation does not oblige SPCs to undertake any new climate change analysis or projections. The Ministry anticipates that it will build a foundation of climate change science and knowledge as it relates to source protection. More information about the Source Protection Program's plan ahead for climate change should be available this year through a discussion paper posted through the Environmental Registry.